Ritesh Pandey

The TCS Global Coding Contest

05 Hr 56 Min 35 Sec

Guidelines

Coding Area

Editor | Compile & Run History

Submissions

Feedback Form

Graphs

Coding Area

A B C D E F

ONLINE EDITOR (F)

Uncertain Steps

Problem Description

Codu is trying to go down stairs from his building to ground floor.

He can go 3 ways:

1. Walk 1 step at a time.

2. Extend his legs and go 2 steps at a time.

3. Jump down 3 steps at a time.

Given n steps, calculate the number of possible ways to reach the ground floor, provided he can jump 3 steps at most once during this process.

That is, he can jump down 3 steps only once, but at any time, if he wishes, while walking down the stairs.

Constraints

1 <= N <= 1000000.

Input Format

Single Integer denoting the number of Steps, N.

Output

Number of ways to reach ground floor.

As the number can be huge, give output modulo 1000000007.

Test Case

Explanation

Example 1

Input

4

Output

7

Explanation

1, 1, 1, 1

1, 2, 1

1, 1, 2

1, 3

2, 1, 1

2, 2

3, 1

Number of ways = 7.

Upload Solution [Question : F]

☐ I, **ritesh pandey** confirm that the answer submitted is my own.

☐ Took help from online sources (attributions)

Choose a File ...